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DESERT STORM vs DESERT DISASTER: EXAMINATION  
OF THE CULMINATING POINT

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract of

DESERT STORM vs DESERT DISASTER: EXAMINATION  
THE CULMINATING POINT

This paper examines the factors which diminished combat power in Operation Desert Storm. Starting with the US national interest, significant events are described which ultimately led to the Coalition ground offensive in the 1990 Gulf War. The theater campaign plan which launched the operation is outlined in general terms. The impact of logistics and the strain of combat are reviewed to determine the culminating point at the operational level. Finally, the impact of terrain, casualties, and allied support are examined against a possible continuation of the ground offensive.

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## PREFACE

By 28 February 1991 cease-fire, Operation Desert Storm had reached a culminating point. Ground forces lacked the capacity to immediately continue the offensive. Strategically, a continuation was not worth the cost.

During the 1990 Gulf War, I commanded a tank battalion in the 3d Armored Division. The battalion attacked into Iraq on the 24th of February 1990. From 10 March until 2 April, the unit occupied defensive positions on the demarkation line and interdicted movements along highway eight in Iraq. The Iraqi people suffered through the air and ground campaigns. At the end of the war, they suffered attack by their own soldiers. At a distance, we saw the Iraqi military attack its own citizens. I wondered if we stopped Desert Storm too soon. Why did we stop? Could we have continued? What would have happened if we had not stopped Desert Storm when we did? This paper represents my efforts to answer those questions. The scope is limited to ground operations.

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DESERT STORM vs DESERT DISASTER: EXAMINATION  
OF THE CULMINATING POINT

President George Bush, addressing the Aspen Institute Symposium on 2 August 1990, described a vision of the world dramatically changed by Soviet political and economic transformation. In essence, it was a new world order. His March 1990 National Security Strategy of the United States highlighted the emerging crisis in the communist system. Regional threats took on added significance when viewed outside the backdrop of superpower competition.<sup>1</sup>

As if to fulfill the prophesy, Iraq, led by Saddam Hussein, invaded Kuwait the same day President Bush gave his Aspen speech. The Iraqi action would lead the US into war. George Bush had years of experience in government service. Most recently, he served eight years as the US Vice President. His ultimate response to the Iraqi invasion and their subsequent refusal to withdraw was shaped by years of military history. Failure in Vietnam and the loss of marines in the Beirut hotel had impact.

Caspar W. Weinberger, President Reagan's Secretary of Defense, laid out the doctrine which guided strategic decisions. The Weinberger Doctrine established six conditions for committing the US military to combat: (1) risk to US vital interest; (2) clearly define political and military objectives; (3) apply sufficient numbers of forces and support; (4) continually assess the relationship of objectives to forces; (5) assure support from



the public and its elected representatives; and (6) use force only when political, economic, and other means have failed.<sup>2</sup>

In the Weinberger framework, Operation Desert Storm to liberate Kuwait was a tremendous success. The air and ground campaigns achieved many United States' broad policy objectives in the region. US conduct throughout Desert Shield and Desert Storm improved our government's credibility with regional leaders.<sup>3</sup> Yet, the war left untold misery measured in terms of life, property, and economic destruction.

It also left Saddam Hussein in power. Today, the debate continues on whether or not the US led Coalition stopped its attack too soon. This paper suggests that continuation of the attack in Operation Desert Storm would have exceeded the culminating point of the ground offensive. In other words, the power of the attack had diminished sufficiently to jeopardize success of further offensive action. Many paths led to that point in history. The route this paper takes in examining Desert Storm's culminating point starts with US national objectives and the Iraqi invasion. Next, it focuses on the concept of operation which launched the attack toward its culminating point. Finally, it analyzes factors which contributed to diminishing the power of the attack and examines the option to continue the attack.

#### **National Objectives and The Iraqi Invasion**

In addition to violating Kuwaiti sovereignty, the Iraqi invasion threatened a vital US interest and placed national objectives at risk. Our national interest is derived from two

important regional characteristics.<sup>4</sup> First, at least half of the world's oil is located in the Gulf states. Those states are essentially militarily weak in contrast to their northern neighbors. Second, Persian Gulf waters provide essential Sea Lines of Communications (SLOCs) for the movement of oil and other world commerce.<sup>5</sup> Access to Gulf oil and freedom to navigate the SLOCs helps satisfy our economic well-being. Our economy is tied to an interdependent world market. Europe and Japan are even more dependent on Gulf oil than the US. Price changes caused by the Saudi led embargo of 1973 contributed to a world-wide recession.<sup>6</sup> Again, in 1979, oil price rises disrupted the world economy. These events coupled with the Soviet invasion of Afghanistan led to the 1980 Carter Doctrine. It stated that attempts to gain control of the Gulf would be regarded as an assault on the vital interest of the United States.<sup>7</sup> Our economic well-being is aligned to the fate of the Gulf states. Their stability is vitally important to the United States.

Our involvement in the region began in earnest after the Second World War. Influenced by the treatment of the Jews during the war, the US gave strong political support to the establishment of Israel. From the moment the United States recognized Israel, US commitment to the Jewish nation became a fundamental element of American Middle East Policy.<sup>8</sup>

Oil, Israel, and militarily weak friendly Gulf states exist in a region rich in a history of conflict. Nationalism, radical religious fundamentalism, and economic disparity fuel unrest.

Weapons of mass destruction, vast stores of conventional arms, and terrorism add to this friction. At risk were our national objectives which, in general terms, involved promoting the stability and security of allies and friendly states while maintaining the free flow of oil.<sup>9</sup>

Reasons for the Iraqi invasion were rooted in nationalism, religious fundamentalism, and economic conditions. The 1916 WWI Sikes-Picot Agreement gave the British control over much of the Middle East.<sup>10</sup> Their 1922 delineation of boundaries between Iraq and Kuwait gave Iraq 36 miles of coastline while Kuwait got 310 miles. Kuwait refused to lease Warbah and Bubiyan islands to Iraq after the 1980-1988 Iran-Iraq war. Iraq's only other access to deep water in the Persian Gulf lay through the Shatt al Arab which was littered with wreckage from the war with Iran. Hussein said Iraq fought the war to protect the Gulf states from revolutionary Iranian fundamentalists. He felt other Arab Gulf states should share the war's burdens. Iraq emerged from the war with a \$80 billion debt. Kuwait refused to dismiss its loans to Iraq. Hussein accused Kuwait of overproducing Organization of Petroleum Export Countries (OPEC) quotas. This drove down the price of oil which meant an estimated \$1 billion annual loss to Iraq. Finally, Iraq accused Kuwait of side drilling under their border and stealing \$10 billion worth of oil during the 1980s.<sup>11</sup>

Given these reasons the Iraqi army, led by the now famous Republican Guards Forces Command (RGFC), invaded Kuwait on 2 August 1990. Some 11 divisions moved into Kuwait within four

days.<sup>12</sup> In the process, Western civilians were taken hostage. They were used in typical terrorist fashion to dissuade reprisal. By mid-October, eight RFGC divisions were in the Kuwait Theater of Operations (KTO). Thus far, Iraq had deployed 435,000 troops, 3,600 tanks, 2,400 armored personnel carriers (APCs), and 2,400 artillery pieces.<sup>13</sup>

These forces placed the Kingdom of Saudi Arabia and its strategic north-eastern oil fields in danger. The US response was swift. With invitation from the Saudi government, US military deployments for Operation Desert Shield began on 7 August. The specific national policy objectives included: (1) immediate, complete, and unconditional withdrawal of all Iraqi forces from Kuwait; (2) restoration of Kuwait's legitimate government; (3) security and stability of Saudi Arabia and the Persian Gulf; and (4) safety and protection of the lives of American citizens abroad.<sup>14</sup>

August through October saw buildup of US and Coalition forces in Saudi Arabia. The US XVIIIth Airborne Corps and 1st Marine Expeditionary Forces were on the ground. While the defense was being adjusted, the US Central Command began offensive planning. That planning revealed shortcomings. CENTCOM had the necessary forces to defend Saudi Arabia but did not have sufficient forces to liberate Kuwait. On 21 October, General Powell, Chairman of the Joint Chiefs of Staff (CJCS), visited General Schwarzkopf, CENTCOM Commander, to discuss options. A proposed straight-up-the middle attack into Kuwait

was high risk (Figure 1, p. 25) and might not secure the political objectives. Additional forces were needed. An enhanced option, which would become Desert Storm, was also discussed. On 8 November, President Bush announced additional troop deployments including the US VIIth Corps from Europe.<sup>15</sup>

The deployments continued until February 1991. Economic sanctions and political pressured continued as well. Yet, Saddam Hussein refused to withdraw. On 29 November 1990, United Nations Security Council (UNSC) approved Resolution 678. It established a 15 January 1991 deadline for Iraqi withdrawal and authorized the use of 'all necessary means' to enforce the resolution. Hussein, on 6 December, announced the release of the Western hostages but still did not withdraw. The US Congress, in a 52 to 48 vote on 12 January, authorized the President to use US military force in support of the UNSC Resolution 678. Survey of US public opinion revealed a majority thought force should be used if Iraq failed to leave Kuwait.<sup>16</sup>

#### Theater Concept of Operation

As the 15 January deadline approached, the Iraqi order of battle, in the KTO, included 540,000 troops, 4,200 tanks, over 2,800 APCs, and approximately 3,100 artillery pieces. They had 30 days of stockpiled ammunition with 3 days supply at each unit location. The air was protected by an umbrella of anti-aircraft guns and surface-to-air missile systems. The Iraqi air forces could attack anywhere in the KTO and into Saudi Arabia. Its navy had fast patrol boats and coastal defense positions which could

fire surface-to-surface missiles.<sup>17</sup>

Iraq's weapons of mass destruction (WMD) also presented a significant threat. It had Nuclear, Chemical, and Biological (NBC) capabilities as well as ballistic missiles. Intelligence estimated Iraq "could produce a rudimentary nuclear weapon by 1992."<sup>18</sup> In the Iran-Iraq War, Iraq used chemical weapons on both the Kurds and Iranians.<sup>19</sup> It also used SCUD missiles to attack Iranian cities.<sup>20</sup>

Despite its awesome appearance, Iraq also had weaknesses. The command and control system (C2) was top down making it inflexible. Logistics were over-extended and forces were vulnerable to air attack. It was defense oriented and had little deep offensive capability. The quality of ground forces, other than the limited number of Republican Guards divisions, was suspect. In essence, they could be defeated by destroying the Iraqi centers of gravity which were identified as: (1) the C2 used to direct forces; (2) WMD used to threaten other states; and (3) the Republican Guards which could threaten the region if left intact.<sup>21</sup>

The national objectives had been established in Operation Desert Shield. Now the focus in military action shifted from defending Saudi Arabia to forcing a withdrawal from Kuwait. By late December, massive sea and airlift supplies arrived in theater. Coalition forces with more than 540,000 troops from 31 countries assembled to accomplish the mission. Seven army and two marine corps divisions were in Saudi Arabia. Both Britain

and France supplied a division. Arab forces were equivalent to four divisions. Air forces from 12 countries contributed 1,736 combat aircraft including 60 B-52s. Naval forces included six aircraft carriers, two battleships, and several submarines.<sup>22</sup>

These Coalition forces provided the combat power needed to accomplish CENTCOM's military objectives. Those objectives included: (1) attack political-military leadership and command, control and communications (C3); (2) gain and maintain air superiority; (3) cut Iraqi supply lines; (4) destroy NBC production, storage, and delivery capabilities; (5) destroy Republican Guard forces in the KTO; and liberate Kuwait city. To achieve these objectives, General Schwarzkopf designed a phased campaign using his air, ground and naval forces.

Figure 2

THEATER CAMPAIGN PLAN and MILITARY OBJECTIVES <sup>23</sup>				
	PHASE I STRATEGIC AIR CAMPAIGN	PHASE II AIR SUPREMACY IN THE KTO	PHASE III BATTLEFIELD PREPARATION	PHASE IV GROUND OFFENSIVE CAMPAIGN
LEADERSHIP/C3	XXXXXXXX			
AIR SUPREMACY	XXXXXXXX	XXXXXXXXXX		
CUT				
SUPPLY LINES	XXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
NBC CAPABILITY	XXXXXXXX		XXXXXXXXXXXX	
DESTROY				
REPUBLICAN				
GUARDS	XXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXX
LIBERATE				
KUWAIT CITY				XXXXXXXXXX

Thus far, President Bush closely followed the Weinberger Doctrine. Vital interest were at stake in the Gulf. Political

and military objectives were clearly defined and sufficient troops with the required support deployed. He had public support for the operation. Political and economic measures failed to get the Iraqis out of Kuwait. At least one assessment was made of the relationship between objectives and the use of forces.

### The Culminating Point

"On 17 January at 3:01 a. m. Baghdad time, the thunder of jets and lighting of missiles transformed Desert Shield into Desert Storm."<sup>24</sup> While the air campaign pounded Iraqi targets, ground forces repositioned in Saudi Arabia preparing for the ground campaign. Blinded by the air attacks, Iraq was unaware of the operational maneuver which placed two corps on its exposed west flank.

Coalition forces were arrayed with the Saudi task forces in the east adjacent to the Persian Gulf. Immediately to their west were the two divisions of the 1st Marine Expeditionary Force (1MEF). The Arab Coalition forces and two Egyptian armored divisions were located just west of the 1MEF. Next came the US VIIth Corps west of the pan-Arab forces. The US 1st Cavalry was in a reserve position located to the VIIth Corps rear. The XVIIIth Airborne Corps was positioned west of the VIIth Corps and the 6th Light Armored Division (French) was in the far west.<sup>25</sup>

Concept for the ground campaign included a supporting attack in the east and a flank attack in the west. The 1MEF and Arab forces would conduct the supporting attack. The 1st was to encircle Kuwait City and the Arab forces were to seize a critical road



junction north of the city. In the west, the 6th French and XVIIIth Airborne would go deep into Iraq to block Republican Guard escape routes across the Euphrates River. VIIth Corps was to destroy the Republican Guards. The 1st Cavalry Division was the theater reserve.<sup>26</sup> (Figure 3, p. 26)

The key to success in an offensive campaign is to defeat the enemy before the offensive reaches what Clausewitz called its culminating point. This culminating point is achieved when a force on the offensive expends so much of its strength that it ceases to hold significant advantage over the enemy. At that point the attacker either halts to avoid operating at a disadvantage or goes on and risks becoming weaker than the defender.<sup>27</sup>

With no change in concept, the ground campaign was launched on 24 February 1991. Coalition forces achieved Desert Storm's military objectives at the end of 100 hours of ground combat. Kuwait City was liberated, Iraqi forces were cut off, and most of the Republican Guard in the KTO were destroyed. Best estimates of Iraqi battle losses included 3847 tanks, 1450 APCs, 2917 artillery pieces.<sup>28</sup> Incomplete target sets hindered destruction estimates of NBC capabilities.<sup>29</sup> General Schwarzkopf, fulfilling Weinberger's remaining condition, assessed the relation between objectives and the use of military force. He gave the assessment to General Powell and the President on 27 February. They directed a halt and cease-fire commencing 28 February.<sup>30</sup> Coalition forces had established the necessary military conditions on the ground to achieve the national objectives before crossing the culminating point. Yet, by 28 February, the power of the attack had diminished.

"Strategic and operational offensives reach a culminating point for several reasons. The forward movement of supplies may be insufficiently organized or may lack transportation, or available stocks may be exhausted. The need to protect lines of communications from partisans or regular forces operating on the flanks or in rear areas may have sapped the strength of forward forces to the point that the attacker no longer has the needed quantitative advantage."<sup>31</sup>

"Forget logistics and you lose" was the statement supposedly made by VIIth Corps Commander.<sup>32</sup> Operational logistics in Desert Storm required establishment of support bases deep into the Arabian desert away from entry ports on the Saudi east coast. By the start of the ground campaign, the distances were approaching 400 miles.<sup>33</sup> As the XVIIIth Airborne and VIIth Corps shifted west before the ground attack, logistics had to move. "For 18 critical days, 18 wheelers were transporting combat equipment and material, passing one point on the westward road every minute, every hour, 24 hours a day."<sup>34</sup> Supplies were in position at the start of the ground attack offensive.<sup>35</sup>

The fast pace of the attack quickly consumed fuel supplies. Because of movement, there was no way for attacking units to download fuel to ground storage sites. Consequently, units retained a great number of uploaded fuel tankers. This denied their use in round trip operations to move fuel. The result put tactical units at the "edge of the logistics envelope."<sup>36</sup> Three days into the attack, VIIth Corps' 1st Armored Division (1AD) was critically low on fuel. Only the diversion of fuel from the 3d Armored Division (3AD) kept 1AD in the fight.<sup>37</sup> By the day four cease-fire, the maneuver brigades in five of the six M1A1 tank

equipped divisions were critical on fuel. Lead units had approximately 50 gallons in each of their M1A1 tanks and there was little fuel forward of the division rear areas in Saudi Arabia.<sup>38</sup> The rapid collapse of the Iraqi defense and hard drive to seal off Kuwait caused the fighters to over-extend logistics. The VIIth Corps had fuel, but it was at Log Base Echo some 300 kilometers from the lead units.<sup>39</sup> The theater reserve (1st Cavalry Division) had been committed to the VIIth Corps on 27 February.<sup>40</sup> There were no more ground forces available to add to the attack. A halt was required to replenish fuel. The cease-fire provided that halt.

It also provided time to focus on maintenance. The sea and airlift had brought some 117,000 wheeled and 12,000 armored vehicles into theater.<sup>41</sup> During the attack most tank battalions had about 17 vehicles go down for maintenance failure. These typically included four to five tanks.<sup>42</sup> As units consumed their mobile stores of repair parts, they looked to the rear for replenishment. For the most part, the theater did not lack repair parts. The log bases had tons of class VII major end items like tank engines or class IX smaller repair parts like nuts, bolts, and valves. However, the resupply system was not up to the task of filling unit request. Failure in the automated management system required most of the record keeping to be done by hand.<sup>43</sup> Stubby pencil and data cards had replaced the computer disk. This slowed the parts request process which, in turn, increased the down time on equipment.

Getting the right part was a different matter. Perhaps a more critical supply malfunction involved parts storage. Cataloging parts by part number and location had suffered from the rapid buildup of supplies at the desert log bases. In essence, there was an identification problem at warehouse locations which were no more than trailers spotted at different places in log bases. Large items like tank track or engines were easily recognized and not too difficult to obtain. However, finding smaller class IX parts required mechanic level skills to identify the correct part. Supply personnel moved, stored, and issued parts but were not mechanics. Consequently, units had to send their maintenance people back to hunt parts.<sup>44</sup>

Inadequate automation and parts storage caused a tremendous backlog of request for repair parts. The 4th Battalion, 37th Armor, for instance, received parts from only 6% of its over 3,000 requisitions.<sup>45</sup> The situation led to two age-old army practices. Units began scrounging parts from other units or at the log bases. If parts were not located, they began to strip parts from one down vehicle to fix others. Five parts from one tank might keep five others running but would eventually lead to nightmare when it came time to fix the "hangar queen."<sup>46</sup> Just to keep equipment moving, unit were playing a shell game. The cease-fire afforded time to scrounge parts or cross level them between down vehicles.

With a cease-fire in place, supply convoys began the long round trips to bring support to forward units. Those trips were

not without hazard. Lines of communications had to be secured between the forward units and the log bases. Securing lines of communications would divert combat power. In the 3AD, the 2d Brigade got the rear security mission on 27 February. For 10 days it was responsible for the division route to the rear. The attack had moved swiftly around and through the Iraqi defensive positions. The desert was littered with the results of the fight. At any point along the 250 kilometer route back to Log Base Echo, supply convoys might run into unexploded ordnance, unplotted enemy minefields, or by-passed enemy units.<sup>47</sup> Engineers worked to improve the route across the desert, yet it was a two-day trip to Echo and back.

With forward units consolidating in Kuwait and southeast Iraq, support lines needed to shift east. This would shorten distances and take advantage of the limited Kuwaiti road network. The western move of supplies which supported the XVIIIth Airborne and VIIth Corps flank attack had taken 18 days of around-the-clock operations. Shifting them back to the east would take considerable time. The shift began with the 28 February cease-fire, but now the focus was restoring Kuwait.<sup>48</sup>

Strategic and operational offensives reach a culminating point when...the soldiers of the attacking force becomes physically exhausted...<sup>49</sup>

For the attacking ground force, Desert Storm meant 100 hours of virtually non-stop motion. The attack began in the rainy early morning hours of 24 February as the marines, in the east, crossed into Kuwait. Some 300 miles to their west, the French

6th Light Armored Division began its move into Iraq. The XVIIIth Airborne Corps was also on the move.<sup>50</sup> The four divisions of the VIth Corps began operations later in the day starting with an obstacle breach conducted by the 1st Infantry Division (1ID). The British 1st Armored Division followed the 1ID. The 2d Armored Cavalry Regiment (2ACR) was west of the 1ID. The 2ACR was ahead of and covered the movement of the 1st and 3d Armored Divisions (1AD&3AD). These two divisions had the mission to destroy the Republican Guards.<sup>51</sup> (Figure 4, p. 27)

At 1445 hours on 24 February, the 3AD received permission to begin movement. At 1448, its lead element, the 2d Brigade (2BDE), started crossing into Iraq. The 4th Squadron, 7th Cavalry, screening the 3AD right flank, engaged 29 enemy vehicles with close air support at 1801 hours. Activity lasted until approximately 0300 the next morning. Soldiers were busy securing positions, refuelling vehicles, performing quick maintenance, and processing prisoners of war (POWs).<sup>52</sup>

The 3AD was on the move by 0551 hours 25 February. At 1115, orders were issued to shift from the division movement formation into the attack formation. The shift was not completed until well into the night. This placed the 1BDE on the right and the 2BDE followed by the 3BDE on the left. At 2200 hours, 2BDE received orders to pass through the 2ACR the next morning. The orders also directed a change from the brigade's planned north movement to an easterly orientation. New instructions had to be issued to subordinate units. Leaders got little sleep that night

as they prepared adjustments to their plans. The soldiers were busy doing the same things they had done the previous night. Actions were complete approximately 0200 hours.<sup>53</sup>

The division began movement at 0500 hours 26 February. The 2BDE completed passage through the 2ACR by mid-day. Enemy resistance was light, but movement was hindered by a mounting sand storm. At 1629 hours, the 2BDE made contact with the Tawakalna Republican Guards Division. The 2BDE launched two daylight and three night assaults into the Tawakalna position. Crewmen from 2BDE's tanks and infantry fighting vehicles destroyed enemy armor at distances ranging from 20 meters to over 3,000 meters. The direct fire battle lasted for 20 hours.<sup>54</sup>

By noon 27 February, the 3AD had passed the 3BDE through the 2BDE and continued its attack to the east. A running gun battle was fought until the division reached its final objectives that evening. During the night, soldiers remained on their weapons and were constantly looking for any escaping enemy forces.<sup>55</sup>

Technology brought change to war. Night vision capability and navigation devices allowed the VIIth Corps to fight day and night through rain and sand storms. However, severe problems can arise after only several days unless soldiers get at least three hours of uninterrupted sleep per day. This must be combined with taking frequent catnaps. Resting units for 48 hours helps to lessen the stress of combat.<sup>56</sup>

Experiences in the 3AD were typical to the VIIth Corps and most of the ground forces. The missions of the 1AD and 3AD were

probably no more easier or more difficult than those of other units.<sup>57</sup> The focus, however, was different. Both divisions had to close with and destroy the Republican Guards. It took two days of continual motion to reach that enemy force. For nearly 30 hours, cavalry, tank, and mechanized infantry soldiers were in close ground combat. On 28 February they needed to rest.

Operation Desert Storm reached an operational culminating point on 28 February for a variety of reasons. The westward maneuver to outflank the Iraqis lengthened supply lines. Forward units needed fuel and time to sort maintenance problems. Adjustments to shorten lines of communication were necessary and supplies needed to be shifted to support the forces in Kuwait and southeast Iraq. Finally, soldiers needed to rest. Fuel and rest could be gained in two or three days. However, several weeks would be required to shift supplies for a continued offensive.

#### Option to Continue

Desert Storm had achieved US national objectives. In today's debate, some people argue that the attack should have continued until Saddam Hussein was removed from power. Continuation of the ground campaign would mean a change to US objectives for Desert Storm. President Bush had hinted at a new objective on 15 February when he suggested that the Iraqi people overthrow Saddam's government.<sup>58</sup>

On 28 February 1991, Coalition forces controlled a large portion of southern Iraq. Ground troops had not attacked into Iraqi populated areas but were positioned along the Euphrates



River and on the outskirts of Basra.<sup>59</sup> Defeat of Iraqi forces in the KTO created civil turmoil in Iraq. In the north, the Kurds were in revolt and there was a Shiite uprising in the south.<sup>60</sup> Yet, Saddam Hussein remained in charge. His power base was the Republican Guard Forces. Their loyalty meant he could reestablish firm control over Iraq and its people.

A continuation of the ground offensive might well have targeted the remaining Republican Guards and loyal regular army forces. Their destruction could mean the downfall of Saddam. At least one brigade of the Hammurabi Republican Guards Division had escaped, with its armor, to Basra. Three to four divisions with armor support were located around Baghdad.<sup>61</sup> Continuing the ground attack carried considerable risk. More difficult terrain, increased casualties, stiffened enemy resistance, use of mass destruction weapons, and lack of allied support could stretch the operation beyond the culminating point.<sup>62</sup>

The fight for Kuwait and destruction of Iraqis in the KTO was primarily executed on flat desert favorable to armored operations. Most armor fights were away from populated areas. The terrain favored mobility and maneuver.<sup>63</sup> Terrain in the Euphrates valley was quite different. Land between the Tigris and Euphrates rivers is interlaced with irrigation canals, small lakes, and marshlands. Most of Iraq's estimated 17.6 million people live in this area between Baghdad and Basra.<sup>64</sup>

The terrain could easily canalize armored forces. Forced in direction and lacking maneuverability, armor would be extremely

vulnerable to defenders fighting from prepared positions. This would also hazard helicopter operations. The urban nature, created by small villages and the large cities of Baghdad and Basra, lends itself to dismounted infantry operations.<sup>65</sup> The Iraqis fought extremely hard to hold Basra during the Iran-Iraq War. In 1987, Iran launched a series of massive infantry assaults against prepared Iraqi positions around the city. Despite six weeks of intense fighting, Iran failed to encircle or capture Basra.<sup>66</sup> During the course of the war, the Iraqi regime used SCUDs to attack Iranian cities and chemicals to attack Iranian ground forces. These WMDs were primarily used to reverse battlefield situations when Iraq faced imminent defeat.<sup>67</sup>

Close quarter infantry fighting would drive up the number of US casualties. The Republican Guards had fought hard against VIIth Corps in Desert Storm. In all probability, enemy resistance would increase as they fought to defend their homeland. There was also the threat of weapons of mass destruction. Did Saddam still have a chemical capability? Had all his SCUDs been destroyed? Did he have a crude nuclear weapon? Iraqi NBC capabilities had been targeted during the air campaign but there was no assurance that they were destroyed. Saddam had not used these weapons during Desert Storm. But, faced with removal from power, Saddam might well create his "mother of all battles." He did so in the war with Iran.

Civilian casualties would also increase as the attacking forces neared the populated areas. Ground force weapons lacked

the precision of those used in the air campaign. Although the air campaign sought to minimize collateral damage, Green Peace estimated Desert Storm produced between 5,000 and 15,000 civilian casualties. Another 4,000 to 6,000 people died of wounds, lack of medical attention, or malnutrition in March and April. US combat and noncombat figures were reported as 304 US dead.<sup>68</sup> Surely the US public was relieved that earlier predictions of some 10,000 US dead had not come true.<sup>69</sup> How long would CNN televised the destruction as it had done along the "highway of death" out of Kuwait? How long could the American public stand further casualties?

It was estimated that at least two divisions would be required to cut off Baghdad. This did not include an assault into the city. Air forces had destroyed bridges across the Tigris and Euphrates rivers during the war. The rivers were between US forces and Baghdad. There was virtually no bridging in theater. It would take time to bring in equipment and move heavy forces to support infantry operations.<sup>70</sup> Even if Baghdad was surrounded, there was little chance Saddam would capitulate. In all probability, he would escape before hand to lead guerrilla operations against the US attackers.<sup>71</sup> How long would the US public stand another Vietnam situation? Television would cover the expansion of hostilities. The American public supported using force to free Kuwait. But, the overthrow of Hussein was a different matter. It was highly unlikely the President would have public support for the action.<sup>72</sup>

Arab members of the Coalition also were unlikely to support a new offensive. History developed a general Arab distrust of Western powers. In support of Arab revolt against the Ottoman Turks in WWI, Britain promised Arab independence in the Middle East. Yet, when the war ended, Britain and France divided the region into separate zones of influence and maintained control over the Arabs. State borders in the region were created by Europeans as the Arab Countries slowly gained independence. This led to many of the region's current border disputes. The British also gave support for a Jewish home land in 1917.<sup>73</sup> This would eventually give rise to the current Arab-Israeli conflict.

The US was quick to recognize and give support to Israel. Yet, the US was perceived as inconsistent in support of other friendly regional states. It failed to support the Shah during the Iranian Revolution. It withdrew marines out of Lebanon after the 1983 bombing in Beirut. It failed to strongly condemn Iraq's use of chemicals against Iran.<sup>74</sup> This was not a good record of commitment in the Arab view. To gain trust, President Bush promised King Fahd of Saudi Arabia that he would withdraw American troops whenever the king thought it was necessary.<sup>75</sup>

The Arab forces were willing to fight to liberate Kuwait but not willing to attack into Iraq.<sup>76</sup> Only US, British and French forces invaded Iraqi territory. The legal basis for operations in Iraq came from UNC Resolution 678 which authorized use of force to get Iraq's military out of Kuwait.<sup>77</sup> Desert Storm had achieved that purpose. Iraq's military was in complete disarray

in the KTO. For the Arabs, continuation of the attack would appear an pure act of aggression by Western powers.

Further destruction of the Iraqi military could create a power vacuum in Iraq. The Shiite uprising gravely concerned the Arab states which supported the Coalition. There were centuries old divisions in the Moslem community. The Sunni branch and Shiite branch differed in interpretation of the Koran. The most important difference, however, was in political activity. The Iranian Revolution gave rise to radical Shiism. It "established its credentials as a revolutionary and anti-Western, culturally indigenous force, which gives it broad appeal that cuts across the borders of states and languages."<sup>78</sup> To coordinate military protection against the Iranian threat, the oil rich states formed the Gulf Cooperation Council (GCC) which included Saudi Arab, Bahrain, Kuwait, Qatar, United Arab Emerites, and Oman.<sup>79</sup>

With Iranian support and a power vacuum in Iraq, the Iraqi Shiite revolution could spread into Saudi Arabia and the oil rich GCC states. It might even spread across Syria and into Egypt. With the possible exception of Kuwait, the GCC counties, Egypt, and Syria would not support the option to continue.

To direct further offensive operation meant crossing the strategic culminating point. Even without NBC warfare, the effects of terrain and stiffened enemy resistance would drive up US casualties. The distinct possibility of another Vietnam was too great. Neither the American public or the Coalition would support the action.

## Conclusions

In their own ways, both Carl von Clausewitz and Casper Weinberger underwrote success in the 1990 Gulf War. Each established concepts which guided US action in the conflict. Weinberger, in the 1980s, articulated the strategic framework for committing the US military to combat. At least 150 years earlier, Clausewitz developed concepts for employing military forces in war. Iraq's invasion of Kuwait set in motion a series of regional, international, and US domestic events which ultimately led to armed conflict involving US forces. President Bush, guided by the Weinberger Doctrine, provided strategic rationale, resources, and direction to secure vital US national interest. General Schwarzkopf was responsible for design and command of the theater campaign to achieve the national purpose.

Operational decisions were guided by Clausewitzian precepts. Iraq's centers of gravity were identified and targeted. Air attacks began 17 January 1990. In a single blow, five and a half weeks later, the ground campaign decisively achieved the military conditions for strategic success. The air and ground campaigns accomplished US national objectives.

By the 28 February cease-fire, another Clausewitzian concept manifested itself on the battlefield. The offensive reached an operational culminating point. The power of the attack was diminished by lack of fuel, physical exhaustion, and extended lines of communications. Supply management problems started to surface. Restoring fuel and physical strength would not take a

long time. Local tactical operations could begin after several days. The situation at theater level was different. It would take several weeks to align the lines of communications and shift supplies. Then, it would be possible to begin another theater level ground offensive.

If executed, the option to continue would cross the strategic culminating point. Effects of terrain combined with heightened enemy resistance would significantly increase military and civilian casualties. In turn, the operation would lose support of the American public. Liberation of Kuwait not the destruction of Iraq had been the goal. Further offensive action would not have the support of the Coalition's Arab partners. Although reduced in combat power, Iraq could serve as a buffer to Iranian radical fundamentalism. It was in the Arab interest to keep Hussein in power. Continuing the attack meant not only the fracture of Iraq, it would also fracture the Coalition.

Loss of allied regional allied support coupled with the loss of American public support meant the operation lacked the strategic power to continue. Achieving US national purpose lay in maintaining credibility with regional states. A broken promise to King Fahd and by extension the GCC states, Egypt, and Syria did not serve US long term regional interest. The option to continue simply was not worth the strategic cost. Executing the option would have turned Desert Storm into Desert Disaster.

Figure 1  
High Risk Plan<sup>80</sup>

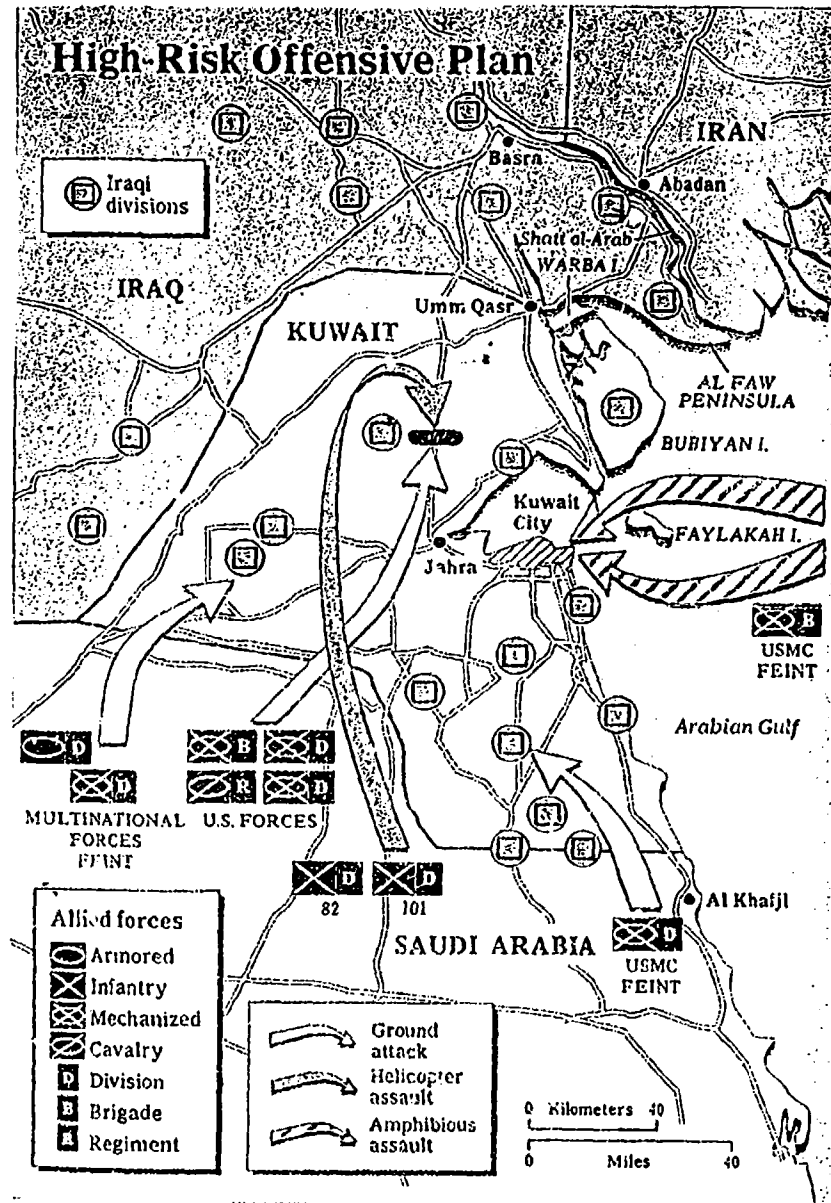
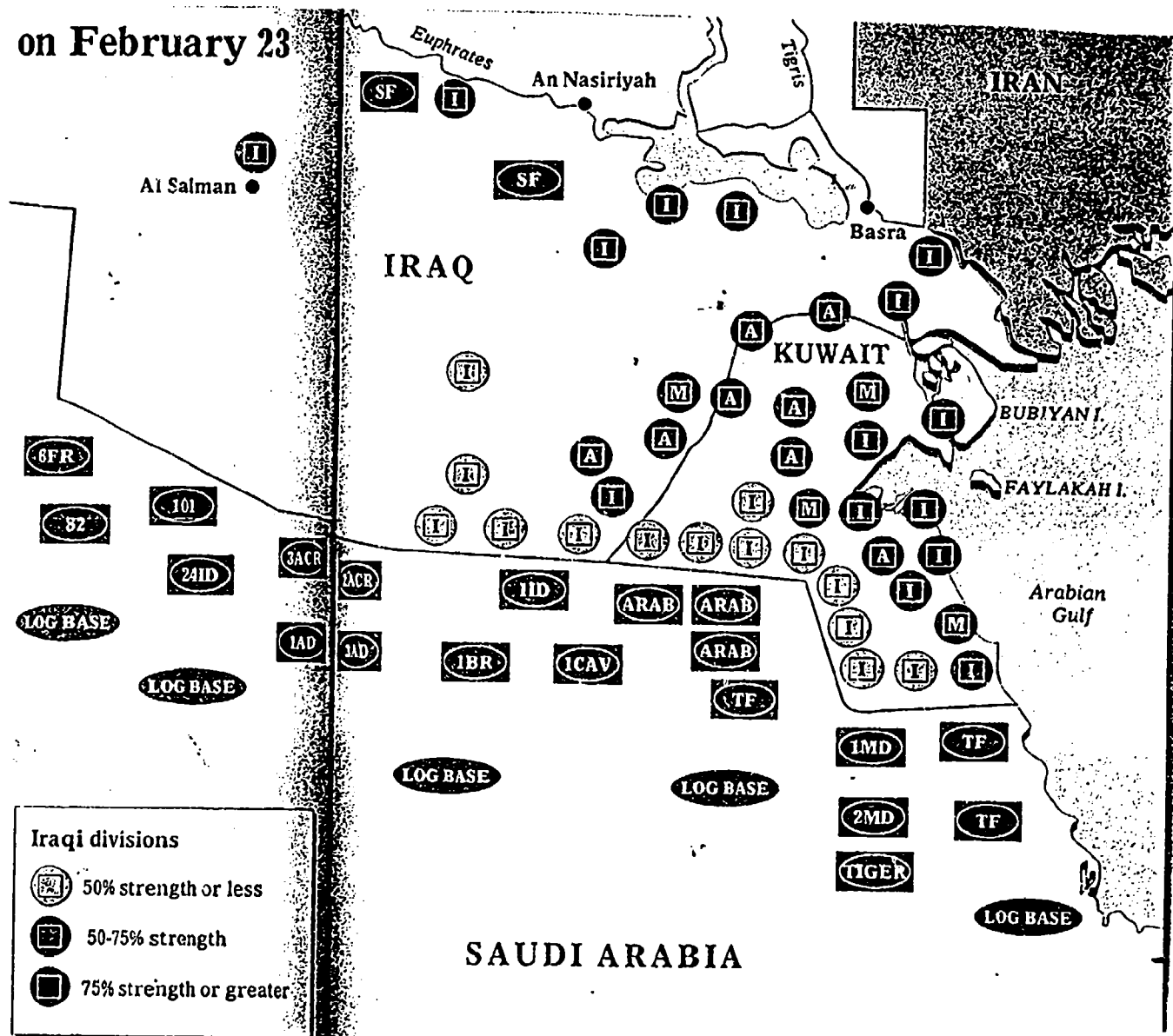




Figure 3  
Troop Dispositions<sup>81</sup>

on February 23

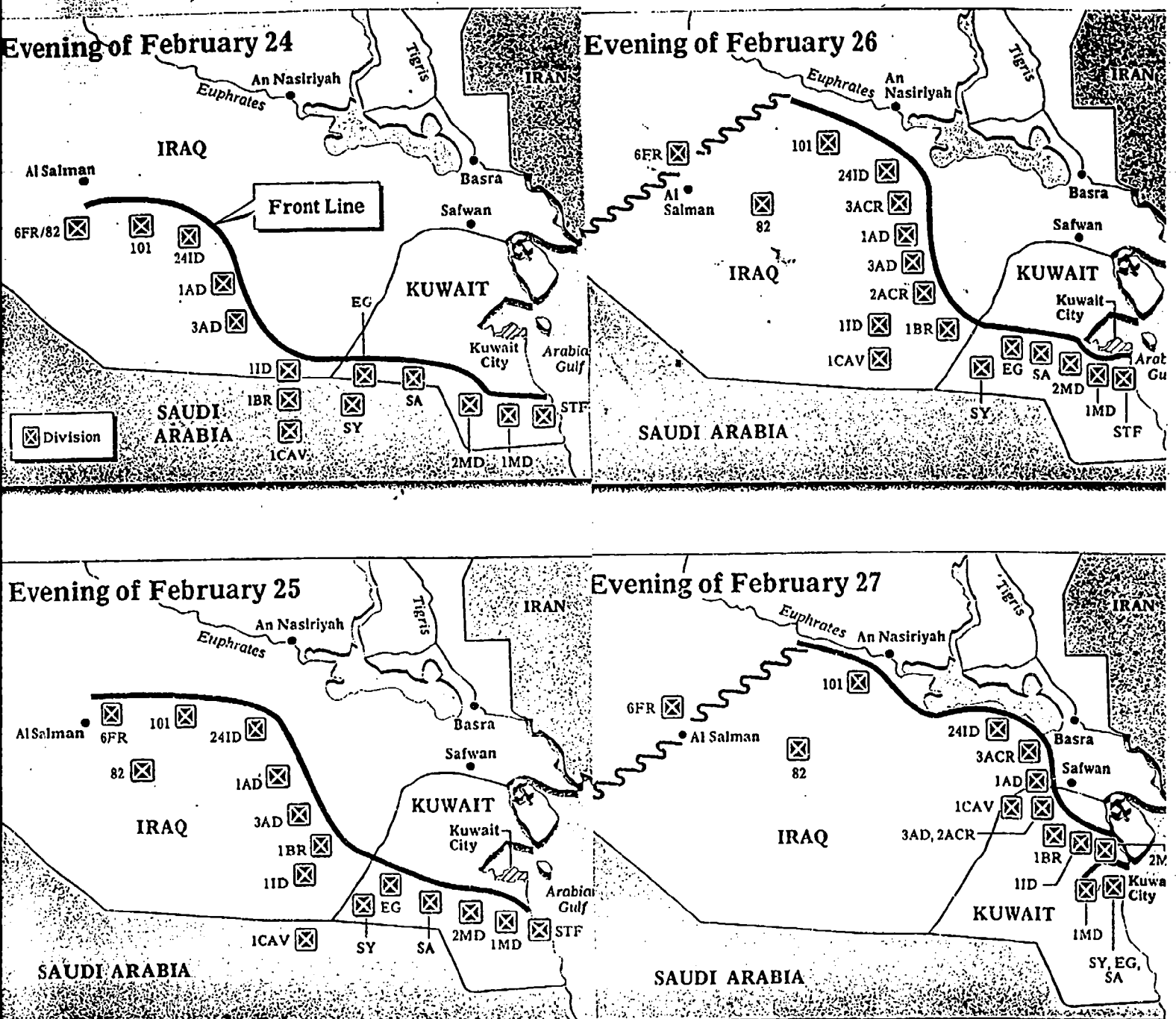


3AD 3rd Armored Division  
24ID 24th Infantry Division (Mech.)  
82 82nd Airborne  
101 101st Airborne  
SF Special Forces  
TIGER Tiger Brigade

ICAV 1st Cavalry Division  
IID 1st Infantry Division (Mech.)  
IAD 1st Armored Division  
IMD 1st Marine Division  
2MD 2nd Marine Division  
2ACR 2nd Armored Cavalry Regiment  
3ACR 3rd Armored Cavalry Regiment

Allied units  
ARAB Saudi, Egyptian, and Syrian Divisions  
6FR French 6th Light Armored Division  
TF Saudi Task Force  
IBR British 1st Armored Division

Figure 4  
Movements 82



## NOTES

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